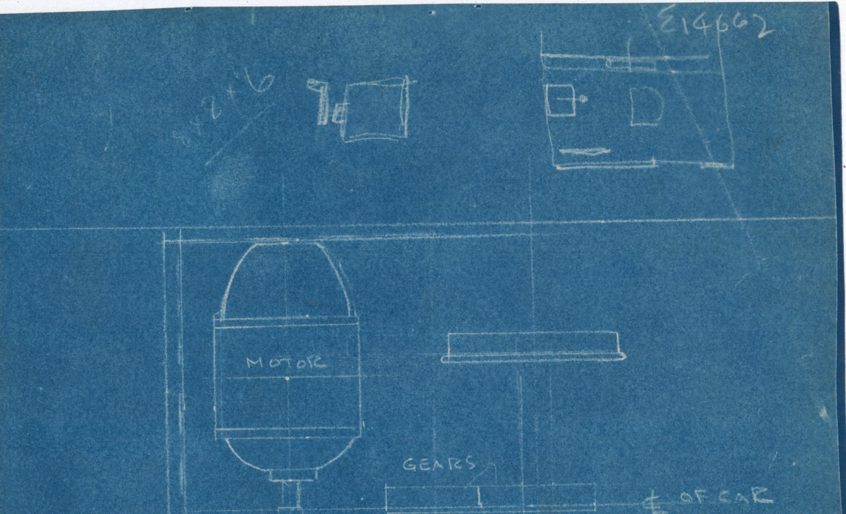
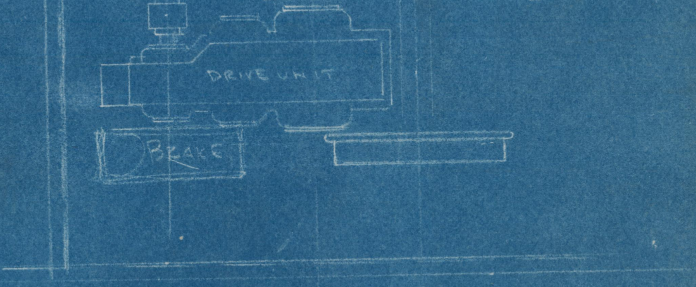

E14662
8x2x6
MOTOR
GEARS
℄ OF CAR


DRIVE UNIT
BRAKE

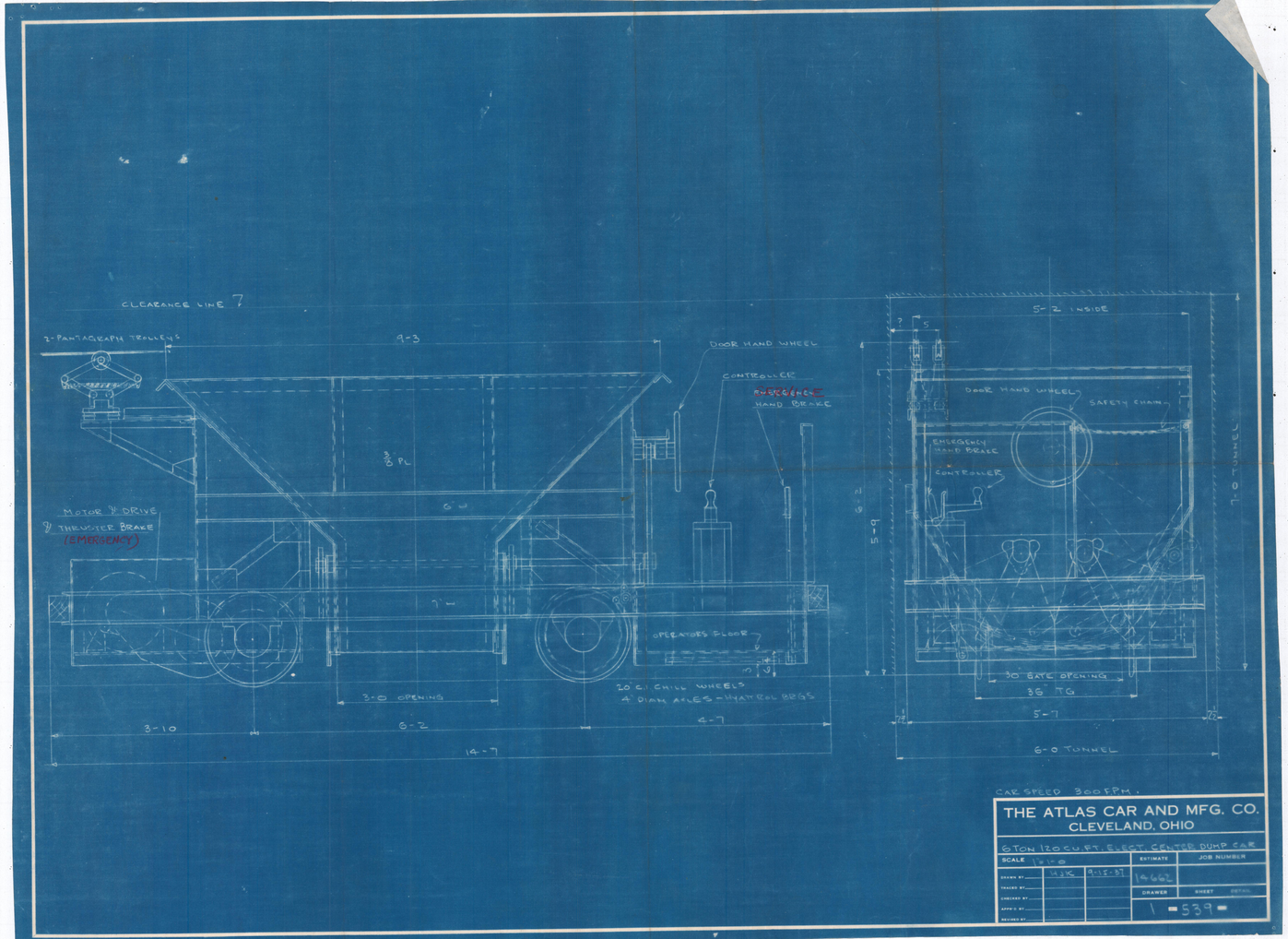
DRIVE ASSEMBLY

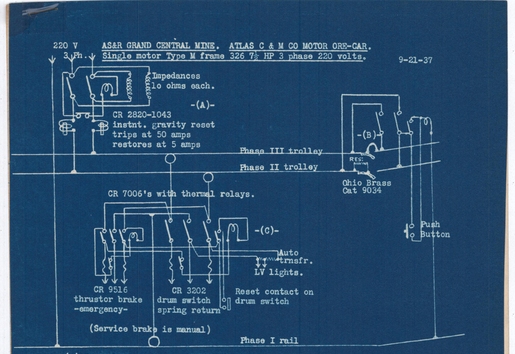
SCALE 1" = 1'-0

HJK
9-16-37.

THE ATLAS CAR & MFG CO
CLEVELAND O

E14662 ✓


CLEARANCE LINE
2-PANTAGRAPH TROLLEYS
9-3
DOOR HAND WHEEL
CONTROLLER
EMERGENCY HAND BRAKE
3/8 PL
MOTOR & DRIVE & THRUSTER BRAKE (EMERGENCY)
OPERATORS FLOOR
3-0 OPENING
20 C.I. CHILL WHEELS
4 DIAM. AXLES - HYATT ROL. BRGS
3-10
6-2
4-7
14-7
5-2 INSIDE
DOOR HAND WHEEL
SAFETY CHAIN
EMERGENCY HAND BRAKE
CONTROLLER
5-9
30" GATE OPENING
3/8 "TG
5-7
6-0 TUNNEL
CAR SPEED 300 FPM.
THE ATLAS CAR AND MFG. CO.
CLEVELAND, OHIO
6 TON 120 CU. FT. ELECT. CENTER DUMP CAR
SCALE 1"=1-0
DRAWN BY
TRACED BY
CHECKED BY
APP'D BY
RELEASED BY
W.J.K.
9-15-27
ESTIMATE
14662
JOB NUMBER
DRAWER
SHEET
DETAIL
1
539



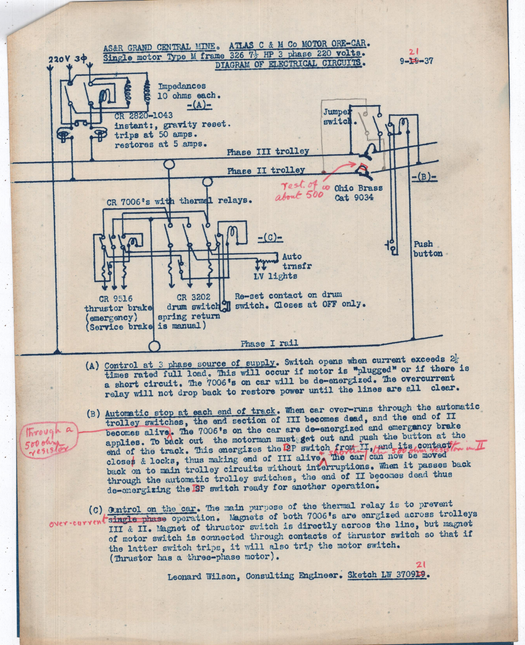
-(A)-Control at 3 phase source of supply. Switch opens when current exceeds 2½ times rated full load. This will occur if motor is plugged, or if there is a short circuit. The 7006's on car will be de-energized. The overcurrent relay will not drop back to restore power until the lines are all clear.

-(B)-Automatic stop at each end of track. When car over-runs through the automatic trolley switches, the end section of III becomes dead, and the end of II is alive through a resistor. The 7006's on car are de-energized and emrgency brake applies. To back out the motorman must get out and push the button at the end of the track. (I altrmatively push magnet switch closed.) This makes ends of II & III alive and car can be moved back on to main trolleys without interruption. On passing back through the automatic trolley switches, the end of II becomes dead thus de-energizing the magnet switch ready for another operation.

-(C)-Control on the car. The thermal relays are for protection of motors under unusual conditions. Magnets of both 7006's are energized across II & III. Magnet of thrustor switch is directly across the lines, but magnet of motor switch is connected through contacts of thrustor switch, so that if the latter switch trips it will also trip the motor switch.

Leonard Wilson
Consulting Engineer.

Sketch LW 370921



ASAR GRAND CENTRAL MINE. ATLAS C & M Co MOTOR ORE-CAR. 21
Single motor Type M frame 826 71 HP 3 phase 220 volts. 9-24-37
DIAGRAM OF ELECTRICAL CIRCUITS.

(A) Control at 3 phase source of supply. Switch opens when current exceeds 2½ times rated full load. This will occur if motor is "plugged" or if there is a short circuit. The 7006's on car will be de-energized. The overcurrent relay will not drop back to restore power until the lines are all clear.

(B) Automatic stop at each end of track. When car over-runs through the automatic trolley switches, the end section of III becomes dead, and the end of II becomes alive. The 7006's on the car are de-energized and emergency brake applies. To back out the motorman must get out and push the button at the end of the track. This energizes the DP switch from II, and its contacts close & locks, thus making end of III alive. The car can now be moved back on to main trolley circuits without interruptions. When it passes back through the automatic trolley switches, the end of II becomes dead thus de-energizing the DP switch ready for another operation.

(C) Control on the car. The main purpose of the thermal relay is to prevent single phase operation. Magnets of both 7006's are supplied across trolleys III & II. Magnet of thrustor switch is directly across the line, but magnet of motor switch is connected through contacts of thrustor switch so that if the latter switch trips, it will also trip the motor switch. (Thrustor has a three-phase motor).

21
Leonard Wilson, Consulting Engineer. Sketch LW 370922.

AMERICAN SMELTING AND REFINING COMPANY
WESTERN MINING DEPARTMENT

D. J. POPE, GENERAL MANAGER
W. R. LANDWEHR, CHIEF GEOLOGIST
J. FRED JOHNSON, MANAGER OF OPERATIONS
NORMAN WEISS, MILLING ENGINEER
L. H. HART, EXPLORATION ENGINEER

600 PACIFIC NATIONAL LIFE BUILDING
SALT LAKE CITY, UTAH

March 31, 1950

Mr. Earl McIntyre, Manager
Mammoth Mining Company
Mammoth, Utah

Dear Earl:

Enclosed are prints of the Atlas Transfer Car in the tunnel to the 200' level of the Grand Central Mine in case you ever get in there.

Yours very truly

J. Fred Johnson

JFJ:EH

J. FRED JOHNSON